

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

27488 •

7590

07/30/2002

MERCHANT & GOULD P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 EXAMINER

CORRIELUS, JEAN M

ART UNIT

707-101000

2172
DATE MAILED: 07/30/2002

(JA13237-270

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 09/615,905
 07/13/2000
 Andy Verprauskus
 44431/233635
 3891

TITLE OF INVENTION: CONVERTING A HIERARCHICAL DATA STRUCTURE INTO A FLAT DATA STRUCTURE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	10/30/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
 - Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

(703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 27488 07/30/2002 **MERCHANT & GOULD** P.O. BOX 2903 Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. **MINNEAPOLIS, MN 55402-0903** (Depositor's name) (Signature (Date) APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/615,905 07/13/2000 Andy Verprauskus 44431/233635 3891 TITLE OF INVENTION: CONVERTING A HIERARCHICAL DATA STRUCTURE INTO A FLAT DATA STRUCTURE (JA13237-270 APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1280 \$0 \$1280 10/30/2002 EXAMINER ART UNIT CLASS-SUBCLASS CORRIELUS, JEAN M 2172 707-101000 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form registered patent attorneys or agents. If no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. ☐ Issue Fee □ Payment by credit card. Form PTO-2038 is attached. Publication Fee ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number ______(enclose an extra copy of this form). ☐ Advance Order - # of Copies (enclose an extra copy of this form). Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

(Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/615,905 07/13/2000		07/13/2000	Andy Verprauskus	44431/233635 3891 (JA13237-270 EXAMINER		
27488 7590 07/30/2002 MERCHANT & GOULD		CORRIELUS, JEAN M				
P.O. BOX 2903		LD		CORRIELUS,	JEAN WI	
MINNEAPOLI		402-0903		ART UNIT	PAPER NUMBER	
				2172		
				DATE MAILED: 07/30/2002		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 243 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 243 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)



United States Patent and Trademark Office

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United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,905 07/13/2000		07/13/2000	Andy Verprauskus	44431/233635	3891
27488	27488 7590 07/30/2002			EXAMIN	ER
MERCHAN P.O. BOX 29		LD		CORRIELUS,	JEAN M
MINNEAPO		5402-0903		ART UNIT	PAPER NUMBER
UNITED ST	ATES			2172	
				DATE MAIL ED: 07/30/2002	

Notice of Fee Increase on October 1, 2002

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after October 1, 2002 (or mailed with a certificate of mailing on or after October 1, 2002), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2002, 37 CFR 1.18 is proposed to be revised to change the patent issue fees as set forth below. As stated above, the final fees may be a different amount, and applicant should check the web site given above when paying the fee.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))--\$655.00 By other than a small entity--\$1,310.00

(b) Issue fee for issuing a design patent:

By a small entity (Sec. 1.27(a))--\$235.00 By other than a small entity--\$470.00

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a))--\$315.00 By other than a small entity--\$630.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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•	Application No.	Applicant(s)	
Notice of Allowability	09/615,905	VERPRAUSKUS E	T AL.
Notice of Anowability	Examiner	Art Unit	
	Jean M Corrielus	2172	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS I herewith (or previously mailed), a Notice of Allowance (PTOL-8: NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT I of the Office or upon petition by the applicant. See 37 CFR 1.3	S (OR REMAINS) CLOSED in this appoint this appoint of the communication of the communication is subject. RIGHTS. This application is subject.	pplication. If not includ	ed
1. This communication is responsive to <u>07/13/00</u> .		5	
2. The allowed claim(s) is/are 1-18.			
3. The drawings filed on are accepted by the Examir	ner.	•	
4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the:			
 Certified copies of the priority documents have 	ve been received.	×. ×	
2. Certified copies of the priority documents have		• ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	
3. Copies of the certified copies of the priority d			tion from the
International Bureau (PCT Rule 17.2(a)).		3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
* Certified copies not received:			•
5. Acknowledgment is made of a claim for domestic priority	under 35 U.S.C. § 119(e) (to a provis	sional application).	Ž.
(a)	application has been received.		j.
6. Acknowledgment is made of a claim for domestic priority	under 35 U.S.C. §§ 120 and/or 121.		
			* :
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of	of this communication to file a reply of this application. THIS THREE-MO	complying with the requ INTH PERIOD IS NOT	irements noted EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be sub INFORMAL PATENT APPLICATION (PTO-152) which gives real	mitted. Note the attached EXAMINEI ason(s) why the oath or declaration is	R'S AMENDMENT or N s deficient.	OTICE OF
8. CORRECTED DRAWINGS must be submitted.			
(a) ☐ including changes required by the Notice of Draftspe	erson's Patent Drawing Review (PTC	0-948) attached	, v
1) ☐ hereto or 2) ☒ to Paper No. <u>7</u> .		o 10) attaonica	
(b) ☐ including changes required by the proposed drawing	correction filed . which has h	een approved by the F	- - - - - -
(c) ☐ including changes required by the attached Examine	er's Amendment / Comment or in the	Office action of Paper	No
Identifying indicia such as the application number (see 37 CFR of each sheet. The drawings should be filed as a separate pape	1.84(c)) should be written on the drawi er with a transmittal letter addressed to	ngs in the top margin (n the Official Draftsperso	ot the back) on.
9. DEPOSIT OF and/or INFORMATION about the depo	osit of BIOLOGICAL MATERIAL I	must be submitted. N	lote the

Attachment(s)

I⊠ Notice of References Cited (PT0	D-8921
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3 Notice of Draftperson's Patent Drawing Review (PTO-948)

attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

5 Information Disclosure Statements (PTO-1449), Paper No.

7 Examiner's Comment Regarding Requirement for Deposit of Biological Material

2	Notice	of Informal	Patent	Application	(PTO-152
				• •	

4 Interview Summary (PTO-413), Paper No.____

6☐ Examiner's Amendment/Comment

8 Examiner's Statement of Reasons for Allowance

9 Other

Jean M Corrielus Primary Examiner Art Unit: 2172 Serial Number: 09/615,905: Page 2

Art Unit: 2172:

DETAILED ACTION

1. This office action is response to the application filed on July 13, 2000, which claims 1-18 are

presented for examination.

Allowable Subject Matter

2. Claims 1-18 are allowable in light of the prior art made of record.

Reason for Indicating Allowable Subject Matter

3. The present application has been thoroughly reviewed. Upon extensive and exhaustive

searches of various databases (see search notes in case jacket), the examiner respectfully submits that

the claimed feature "constructing a shape tree corresponding to the input data tree by collapsing

nodes of said input data tree containing redundant elements into one node, said intermediate data

structure retaining the same parent-child relationship of the input data tree, annotating said shape tree

nodes with properties describing the hierarchical relationships between elements of the input data tree.

building s list of column names for said flat data structure utilizing said intermediate data structure

as annotated, and emitting data from said input data tree into proper columns and row of said flat data

structure" in conjunction with other limitations of the independent claims would not found anticipated

or obvious over the prior art made of record. Therefore, all pending are hereby allowed.

4. Since allowable subject matter has been indicated, applicant is encouraged to submit formal

drawings in response to this Office Action. The early submission of formal drawings will permit the

Office to review the drawings for acceptability and to resolve any informalities remaining therein

before the application is passed to issue. This will avoid possible delays in the issue process.

Serial Number: 09/615,905:

Art Unit: 2172:

Any comments considered necessary by applicant must be submitted no later than the payment

Page 3

of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such

submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Conclusion

5. Any inquiry concerning this communication or early communication from the Examiner

should directed to Jean Corrielus whose telephone number is (703) 306-3035. The Examiner can

normally be reached on the weekdays from 7:00am to 5:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor,

Kim Vu, can be reached on (703)305-9343.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231 or faxed to:

(703) 308-9051, (for formal communications intended for entry) Or:

(703)305-9731 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington.

VA., Sixth Floor (Receptionist).

Jean M. Corrielus

Patent Examiner

July 26, 2002